

Title (en)

MODULATING SUGAR AND AMINO ACID CONTENT IN A PLANT (SULTR3)

Title (de)

MODULATION VON ZUCKER UND AMINOSÄUREGEHALT IN EINER PFLANZE (SULTR3)

Title (fr)

MODULATION DE LA TENEUR EN SUCRE ET ACIDES AMINÉS POUR UNE PLANTE (SULTR3)

Publication

EP 4041753 A1 20220817 (EN)

Application

EP 20775674 A 20200928

Priority

- EP 19200856 A 20191001
- EP 2020077055 W 20200928

Abstract (en)

[origin: WO2021063863A1] There is described herein a plant cell (i) a polynucleotide comprising, consisting or consisting essentially of a sequence having at least 60% sequence identity to SEQ ID NO: 1 (NtSULTR3;1A-S), SEQ ID NO: 3 (NtSULTR3;1A-T), SEQ ID NO: 5 (NtSULTR3;1B-S), SEQ ID NO: 7 (NtSULTR3;1B-T), SEQ ID NO: 15 (NtSULTR3;3-T), SEQ ID NO: 17 (NtSULTR3;4A-S), SEQ ID NO: 19 (NtSULTR3;4A-T) or SEQ ID NO: 23 (NtSULTR3;4B-T); (ii) a polypeptide encoded by the polynucleotide set forth in (i); (iii) a polypeptide comprising, consisting or consisting essentially of a sequence having at least 87% sequence identity to SEQ ID NO: 2 (NtSULTR3;1A-S) or at least 87% sequence identity to SEQ ID NO: 4 (NtSULTR3;1A-T) or at least 87% sequence identity to SEQ ID NO: 6 (NtSULTR3;1B-S), or at least 88% sequence identity to SEQ ID NO: 8 (NtSULTR3;1B-T), or at least 70% sequence identity to SEQ ID NO: 16 (NtSULTR3;3-T), or at least 84% sequence identity to SEQ ID NO: 18 (NtSULTR3;4A-S) or at least 79% sequence identity to SEQ ID NO: 20 (NtSULTR3;4A-T); or at least 87% sequence identity to SEQ ID NO: 24 (NtSULTR3;4B-T); or (iv) a construct, vector or expression vector comprising the isolated polynucleotide set forth in (i), wherein said plant cell comprises at least one modification which modulates (a) the expression or activity of the polynucleotide or (b) the expression or activity of the polynucleotide the polypeptide, as compared to a control plant cell in which the expression or activity of the polynucleotide or polypeptide has not been modified.

IPC 8 full level

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CPC (source: CN EP KR US)

A01H 6/823 (2018.04 - KR US); **A24B 3/10** (2013.01 - US); **A24B 15/24** (2013.01 - KR); **C07K 14/415** (2013.01 - CN EP KR); **C12N 15/8218** (2013.01 - CN EP KR); **C12N 15/8245** (2013.01 - CN US); **C12N 15/8246** (2013.01 - EP KR); **C12N 15/8251** (2013.01 - CN EP KR US)

Citation (search report)

See references of WO 2021063863A1

Designated contracting state (EPC)

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WO 2021063863 A1 20210408; BR 112022005589 A2 20220628; CN 114514321 A 20220517; EP 4041753 A1 20220817; JP 2022552638 A 20221219; KR 20220071260 A 20220531; US 2023200344 A1 20230629

DOCDB simple family (application)

EP 2020077055 W 20200928; BR 112022005589 A 20200928; CN 202080069172 A 20200928; EP 20775674 A 20200928; JP 2022519565 A 20200928; KR 20227014581 A 20200928; US 202017765746 A 20200928